

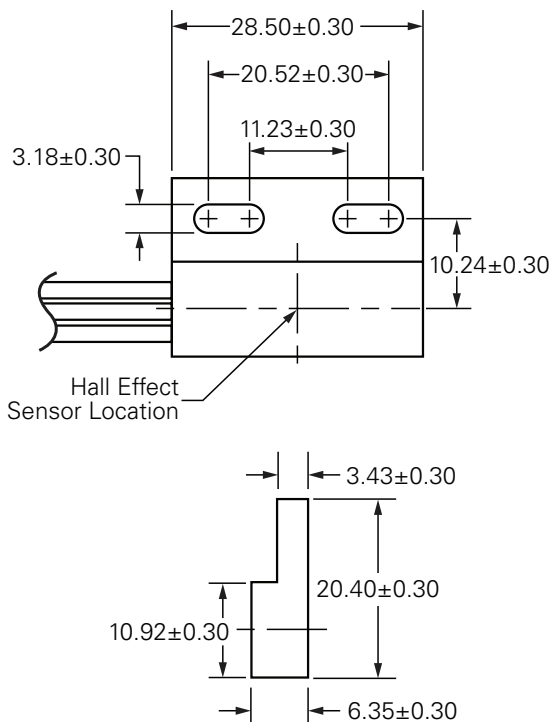
55310 Flat Pack Digital Hall Sensor

RoHS



Dimensions

Dimensions in mm



Note:
Standard actuators available pending application distance requirements. Consult Littelfuse.

Description

The Littelfuse 55310 absolute position sensor provides a digital output signal when activated by a magnet. The internal design of the sensor uses non-contact magnetic Hall effect technology. This sensor is immune to the performance limitations of the mechanical based products that are associated with mechanical wear or contamination.

The 55310 package design commonly finds applications within all types of vehicle and industrial segments and designed to operate in the harsh environments, the sensor has an operating temperature range between -40°C and 105°C . This unit incorporates automotive grade EMI/EMC and reverse battery polarity protection, as well as commercial grade 20 AWG-TXL automotive wire and the option of a Molex type sealed connector.

Features

- Magnetically operated position sensor
- Unipolar digital hall switch
- Three-wire with open-drain output
- EMC protection
- Reverse/over voltage protection

Benefits

- Custom connector, wire length options available. Consult Littelfuse
- High switching speed up to 10kHz
- Long life - up to 20 billion operations
- Unaffected by harsh environments

Applications

- Position sensing
- Limit sensing
- Speed measurement
- Magnetic encoders

Customization Options

Customized versions available. Contact Littelfuse for details.

- Connectors and terminals
- Wire type and length
- Magnetic actuators

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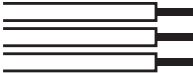
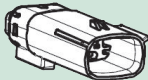
Specifications

Hall Effect Device			Unipolar Digital Switch
Operating Voltage	Recommended	Vdc	4.75 to 24.0
Over Voltage	Absolute Max ¹	Vdc	30
Reverse Voltage	Absolute Max ¹	Vdc	-20
Supply Current		mA - max.	6
Output Current		mA - max.	20
Sensor Actuation with Magnetic South Pole	Operate (output low)	Gauss - Typical	55
	Release (output high)	Gauss - Typical	35
Switching Speed		kHz Max	10
Temperature	Operating	°C	-40 to +105
Pin Out	Size	AWG	20
	Insulation	SAE	J-1128, Type TXL
	Length	mm	300

Notes:

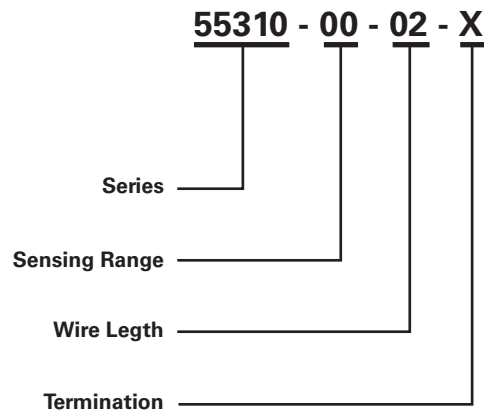
1. This is a stress rating only. Functional operation is not implied for additional load/life information.

Termination Options

Select Option	Description		Color	Function
A	Stripped Leads		Black White Red	Ground Signal V (in)
C	Molex Connector MX 150 33481-0301		Black White Red	Pin 1: Black/Ground Pin 2: White/Signal Pin 3: Red/V(in)

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Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A